



“Britain’s Best Sports Car”

DIRECTORS.

SIR ARTHUR MUNRO SUTHERLAND, B¹- K.B.E.

A. C. BERTELLI.

R. GORDON SUTHERLAND.



WINNERS OF LE MANS RUDGE WHITWORTH BIENNIAL CUP, 1932.

2ND AND 4TH Do. Do. Do. 1933.

AVERAGE SPEED FOR 24 HOURS 65.9 M.P.H.

ALSO HOLDERS OF THE 1500 C.C. LAP RECORD AT 73.3 M.P.H.

**THE CARS DESCRIBED IN THIS CATALOGUE ARE IDENTICAL CHASSIS
TO THOSE WHICH ACHIEVED THE ABOVE REMARKABLE SUCCESSES.**

"LONG DISTANCE RACING IS OUR EXPERIMENTAL DEPARTMENT."

THE 1½ LITRE
ASTON MARTIN



ASTON MARTIN LTD.
FELTHAM ❖ MIDDLESEX

'Phones: FELTHAM 218 and 219
'Grams: "Astomartia, Feltham, Middlesex"
Codes: A.B.C. 5th Edition and Marconi



INTRODUCTION TO THE 1½ LITRE ASTON MARTIN

Our Objects In continuing the production of these cars our object is to keep available to the public at least one car which has not been affected by the general cuts in prices and workmanship which have taken place in recent years. We believe that there are still discriminating motorists in existence who can appreciate the finer points in the handling of a motor car. For these we have marketed our Le Mans model, and are confident that they will find in it a unique vehicle which will handle better and give them more confidence than any other in existence.

Economy In addition they will have a vehicle which by virtue of its relatively small engine (1½ litres) and light weight (19 cwt.) will prove economical to run and to maintain. In actual fact they may expect a petrol consumption of 25/30 m.p.g., an oil consumption of about 2,000 m.p.g., and an excellent mileage per set of tyres. We refer to a car which is driven really hard, and better than this may be expected from a car in more normal use.

In case the above is in any way vague we would explain that the Aston Martin engine can be driven indefinitely at 4,000 r.p.m. without fear of trouble through overheating, failure of lubrication, etc. As this represents over 70 m.p.h. in top gear in the case of the 4.66 axle, we do not anticipate that there will be many opportunities for exceeding it, except for short bursts. Actually the engine will run up to over 5,000 r.p.m., but we do not advise more than 4,750 r.p.m. in the indirect gears, as the engine peaks at this and there is no increase in power when exceeding it.

Durability In short we believe that the Aston Martin is the only small car that will really stand up to the hard driving which modern roads in this country have made possible.

Lubrication In this connection we would stress very highly the merits of the lubrication system fitted to the Aston Martin, one which is only found on a very few of the most successful racing cars, and in aeroplanes. We refer to the dry sump system whereby the oil is contained in a cooling tank away from the engine, and the sump is kept free from oil by a scavenging pump. In the Aston Martin the greatest possible use is made of all the merits of this system. In low built cars of this type it is very difficult to get the engine low enough in the chassis for stability, at the same time leaving sufficient ground clearance; as our engine requires practically no sump this difficulty is overcome.

Another feature is the fact that very large oil ducts are used in conjunction with a large capacity oil pump, thus passing a large quantity of oil through the engine, and using this as a cooling as well as lubricating medium. Actually at 3,000 r.p.m. 2 gallons of oil per minute pass through the entire engine, and it is impossible to raise the oil temperature above 75° C. even under racing conditions: in consequence bearing failure is practically an impossibility.

Road Holding The exceptionally low build and good weight distribution of the car have resulted in making it quite remarkable from the points of view of safety and comfort—both these facts strike one very forcibly on one's first run in an Aston Martin. As has been proved in racing, the car's cornering capabilities are also quite exceptional.

General In conclusion may we add that we honestly believe that our car in its class is unrivalled, and it is our aim to try and offer to all Aston Martin owners not only an unrivalled car, but also Service and personal attention in keeping with it. With this end in view we run a specialised Service Department, and do our utmost to add this very desirable attribute to an already noteworthy car.



PECIFICATION OF THE LE MANS CHASSIS

As we endeavoured to explain in the introduction, the underlying aim in the design of this chassis is reliability and durability at high speeds, and the ability to "hold its tune" without constant attention, hence the dry sump lubrication system, unusual valve gear, and special camshaft drive.

ENGINE.—4 cylinders, bore 69 mm., stroke 99 mm., 1493 cc. R.A.C. rating 11.9 h.p. Tax £12 Max. b.h.p. 70 @ 4750 r.p.m. Compression ratio 7.5/1.

COMBUSTION HEAD.—The overhead valves are mounted in such a relation to the cylinder bore and the sparking plug as to combine the turbulence produced in the latest designs of side valve engines, with the free gas passages and absence from distortion troubles, which are the inherent advantages of overhead valves. The combustion head and gas passages are of special shape providing a free and increased gas flow on the induction side. The foregoing features are responsible for the remarkably good power output at the lower r.p.m., nearly 50 b.h.p. at 3,000 r.p.m.

CAMSHAFT AND VALVE GEAR.—The camshaft is mounted in an aluminium casting, and is supported by three large diameter plain bearings.

It is driven by a chain at the front end of the engine, and a feature of this drive is that the chain itself is driven from a countershaft running at $\frac{1}{2}$ engine speed, instead of direct from the crankshaft. This ensures that the chain speed is relatively low even at high engine r.p.m.

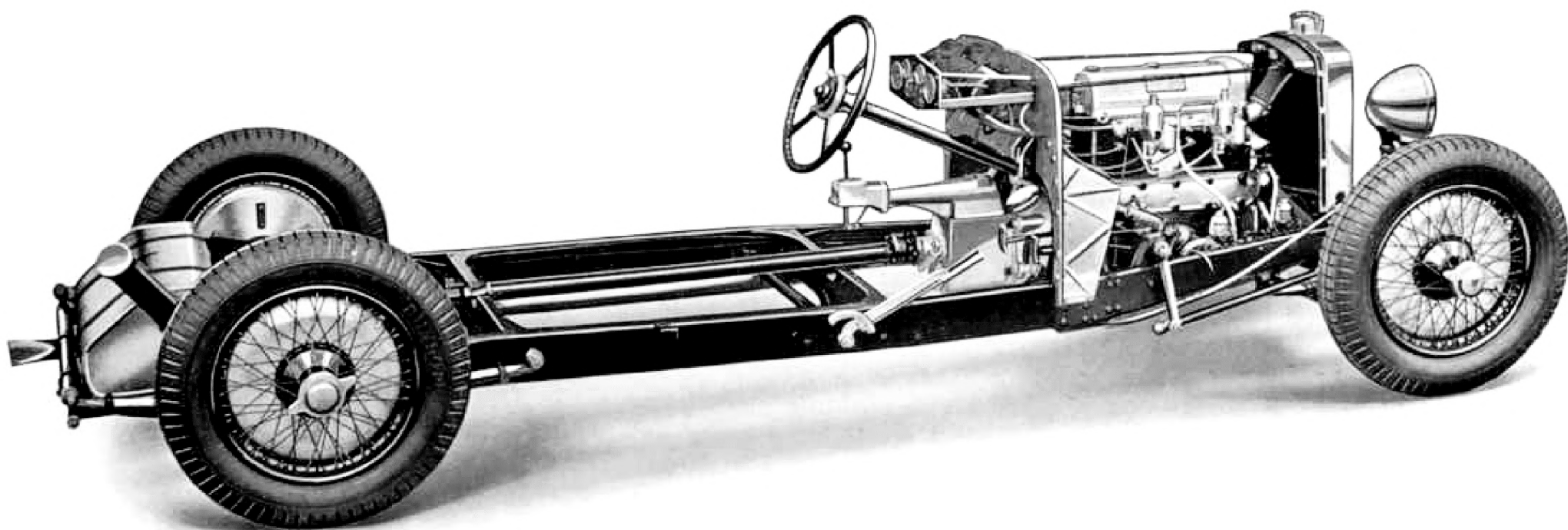
An arrangement is provided so that the cylinder head, camshaft and valve gear may be removed without dismantling the chain and losing the valve timing.

The chain itself is kept permanently in adjustment by a Weller spring directly placed in the main oil return from the overhead gear.

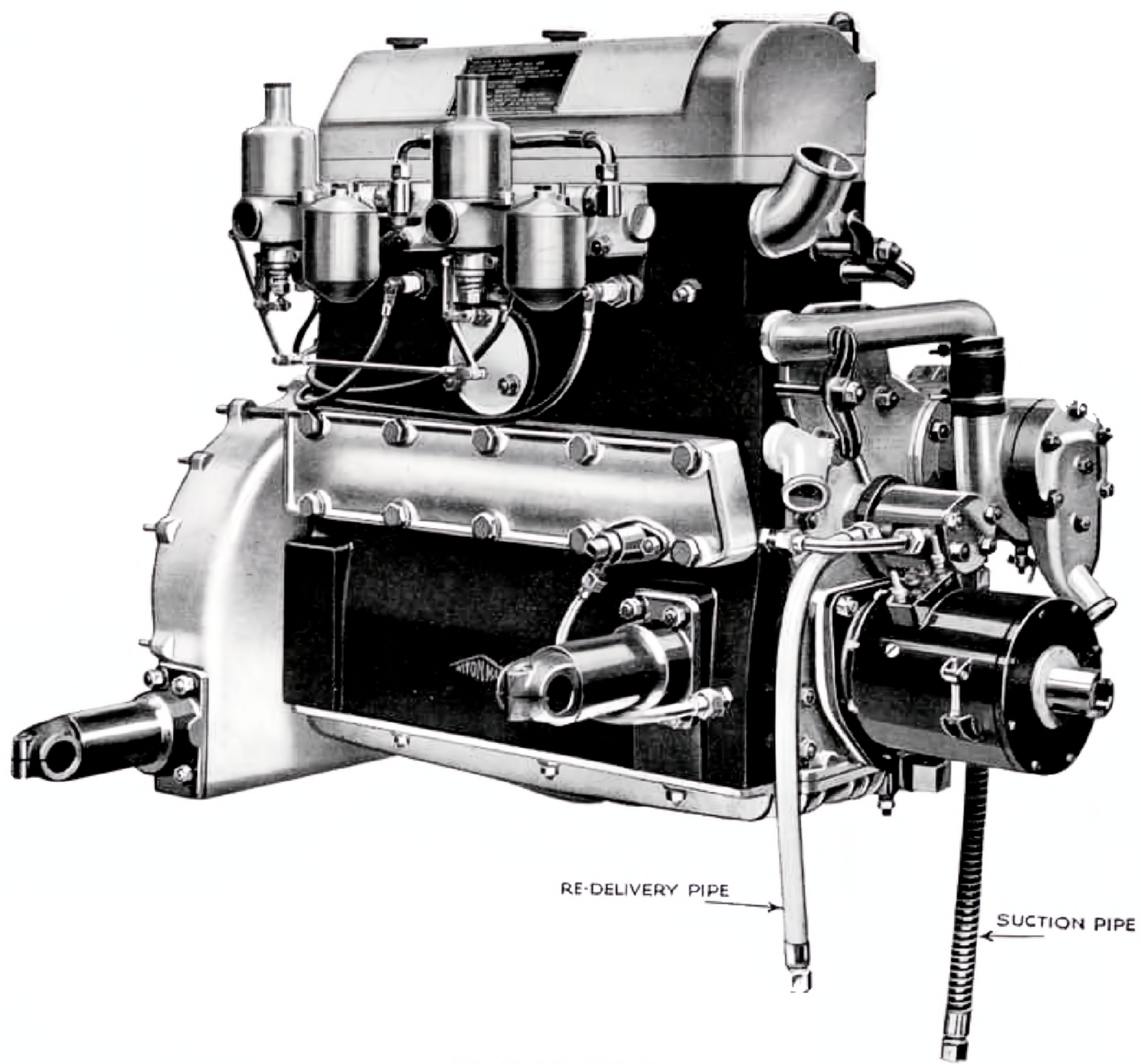
The cams operate the valves by means of rockers, the fulcrums of which can be moved eccentrically for clearance adjustment.

The valves themselves are noteworthy, being made of a patented steel which is remarkable for its toughness under extreme heat (it is only machined with great difficulty). Each is fitted with three concentric springs, thus distributing the load and enabling each spring to be lowly stressed and consequently less liable to breakage.

Instead of the usual cotters securing the valve springs each valve stem has a shallow thread cut in it as in aircraft



LE MANS CHASSIS



LE MANS ENGINE

practice, and a neat collar screwed on and locked by a case hardened covering nut, the latter acting as a bearing surface on which the rocker arm works. This fixing prevents the valve stem being weakened by grooves or slots, thus reducing the possibility of breakage.

LUBRICATION.—Two oil pumps enclosed in a common housing bolted on to the front of the engine are driven direct from the countershaft. One pump is 50% larger than the other and acts as a scavenger, drawing warm oil from the sump and returning it to the oil tank between the front dumb irons. The other pump forces cool oil from the tank to the engine by way of a close grained pressure filter running its whole length. From this the oil is pressure fed to main bearings, big ends and overhead gear. The capacity of the oil tank is $2\frac{1}{2}$ gallons.

COOLING.—A combination of thermo syphon and pump cooling is used. The cylinder walls are cooled by the usual thermo syphon arrangement and a water pump driven by a dog on the front of the timing gear forces a stream of cooling water directly through the cylinder head, thus ensuring that there are no "hot spots" when the engine is kept "flat out" for any length of time.

CYLINDERS AND CRANK CASE.—The cylinders and crank case are cast in one, so producing a block of great rigidity.

CRANKSHAFT.—The crankshaft is made of Nitralloy and is very stiff, carefully balanced and carried in three large white metal bearings and thus able to run at high r.p.m. without vibration.

PISTONS AND CONNECTING RODS.—Duralumin connecting rods are used in conjunction with aluminium pistons to ensure good heat dissipation and extreme lightness.

CLUTCH.—A single plate dry type clutch is used which is extremely smooth and light in operation and requires no lubrication.

GEARBOX.—The gearbox is Spigot mounted on the engine and great care has been taken to ensure its silence.

The casing is of ample thickness and is ribbed inside to prevent resonance. All gears in the box are specially ground and the shafts are short and stiff.

Due to the lightness of the spinning members and the suitably spaced gear ratios, lightning changes up or down are possible without the use of a clutch stop with its attendant additional strains on the transmission.

A short central change speed lever and neat gate are fitted. The following are the gear ratios and speeds using the 4.66 rear axle ratio and 18" wheels with 5.25 tyres.

	ratio	m.p.h.	
Top	4.66	84	} at 4,750 engine r.p.m.
3rd	5.91	66	
2nd	8.737	45	
1st	14.026	28	
Reverse	12.079		

TRANSMISSION.—An open propeller shaft mounted in two oil-tight and dust-proof universal joints takes the drive to the rear axle.

REAR AXLE.—The rear axle is of the spiral bevel type and the differential is carried in a steel banjo-type casing. The standard axle ratio is 4.66.

FRONT AXLE.—The front axle is of special design, the part between the springs, which is subject to simple beam loading, being of I section.

The part between the springs and the stub axles, however, being subject to the complex stresses of steering, and to the torque of front wheel braking, is of robust tubular formation.

THE FRAME.—The frame is of channel section, braced with six cross members, so giving great torsional rigidity. It is upswept over the front axle and passes underneath the rear axle. Half elliptic springs are fitted to the front and rear. The springs are controlled by Hartford shock absorbers, placed in an accessible position.

STEERING.—The conventional arrangement of steering is used in conjunction with a cam gear steering box of high mechanical efficiency. This permits a fairly high gear ratio to be used giving the quick response necessary for controllability at high speeds, and at the same time greatly reduces the transmission of road shocks to the steering wheel.

BRAKES.—To keep the unsprung weight as low as possible aluminium brake drums are used and these are heavily ribbed to dissipate the heat set up when braking and to prevent noise. They are shrunk on to hardened liners, these latter acting as the friction surfaces, and being 14" diameter.

The brake shoes are also of aluminium and are applied by cams operated by cables totally enclosed in watertight sleeves. From half way down each sleeve a flexible pipe is led to a grease nipple placed on the chassis frame. This ensures that the sleeve is kept properly lubricated and free from rust as the grease, when forced in, spreads equally from the centre towards the ends. The brakes have no compensating mechanism but each is fitted with an accessible individual adjustment so that they may be accurately balanced for heavy braking from high speeds.

AUXILIARIES.—The dynamo is driven direct off the front end of the crankshaft and thus also acts as a torsional vibration damper.

The magneto is spigot mounted on the near-side of the engine and is particularly accessible.

Two S.U. carburettors are fitted on a common induction manifold, giving perfect distribution to all four cylinders.

FUEL SUPPLY.—Fuel is carried in a large external petrol tank at the rear of the car holding 19 gallons. This gives the car a range of approximately 530 miles on a full tank. The fuel is fed to the engine by two electric Autopulse pumps placed in a convenient position under the rear seat. These are controlled by a switch on the dashboard, and either or both can be used at any one time. One of them only draws the first 17 gallons, so leaving 2 gallons as a reserve supply.

EQUIPMENT.—5 Rudge Whitworth wire wheels with racing type "knock on" locking nuts are supplied.

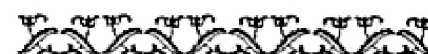
Standard sizes: 18" wheel with 5.25" tyre	} to suit	
19" " " 5.25" "		} type of
21" " " 4.50" "		

Quick fill caps are fitted on water, oil and petrol tanks. 12 volt lighting and starting equipment.

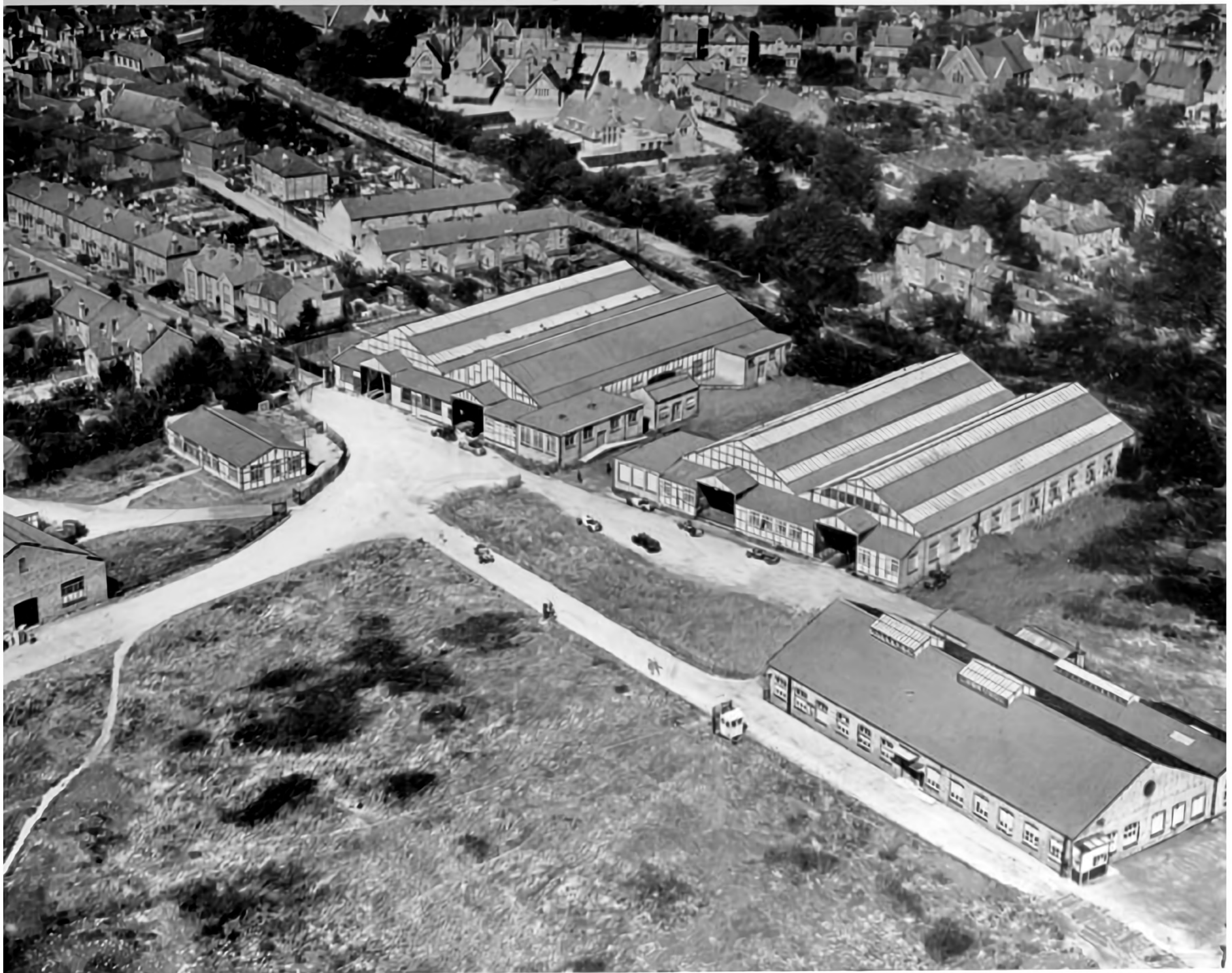
6 in. Speedometer, 6 in. rev. counter, oil pressure gauge, water thermometer, ammeter, petrol gauge, electric horn, radiator stoneguard, lamp stoneguards, jack, pump and complete set of tools.

Wheel base 8' 6"
or 10' 0"

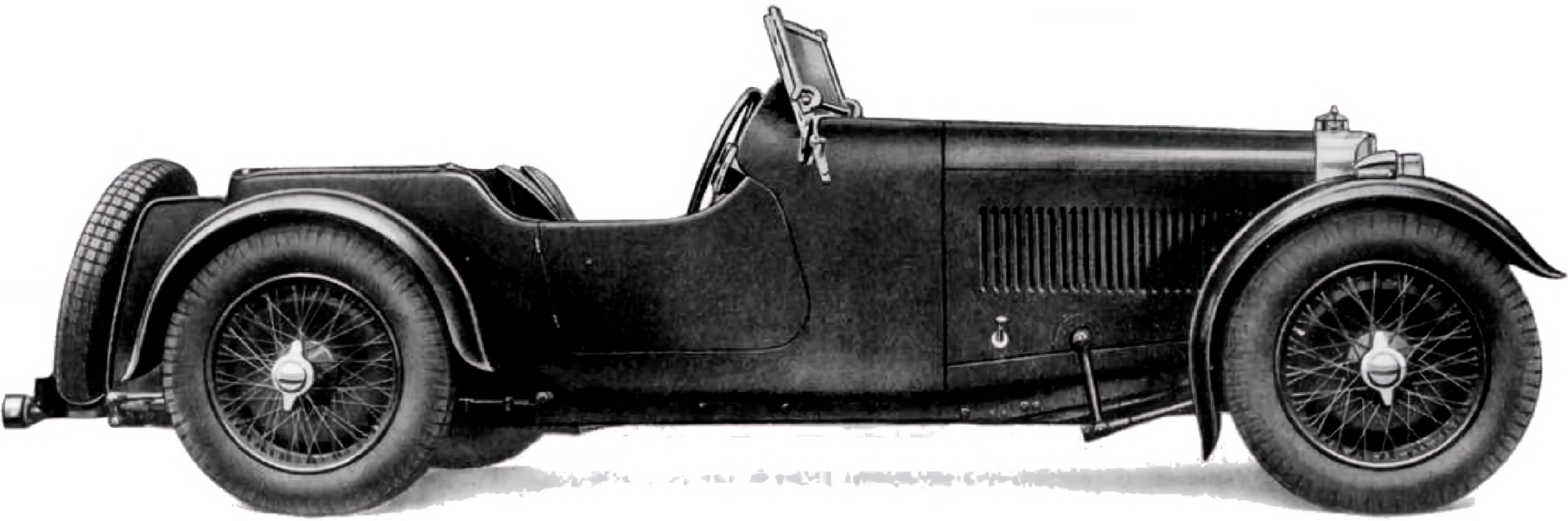
Track 4' 4"



CHASSIS PRICE £525
(complete as above)



VIEW OF WORKS



LE MANS 2/4 SEATER



PECIFICATION OF THE LE MANS 2/4 SEATER

This body is designed to serve as a comfortable 2-seater, giving luggage accommodation in the rear without the inconveniences of inaccessibility, wasted space and scratched paint usually experienced with a dickey seat.

It may also be used as an occasional 4-seater for short journeys, a seat being provided in the rear.

Two wide doors are fitted giving great ease in getting in or out of the car.

The windscreen is of the fully folding type, and is brought as close as possible to the occupants to prevent them feeling the back eddies; it is fitted with a very neat tandem windscreen wiper, operating from the centre.

The hood folds neatly inside the body enabling the tonneau cover to button right over it, and eliminating the necessity for a hood slip.

The two front seats are adjustable, giving a comfortable driving position. They are fitted with pneumatic upholstery. The rear of the body is trimmed with leather to serve as a luggage carrier or occasional seat.

The car is supplied fitted with our special cycle type wings which have been such a successful feature of Aston Martins since 1929.

The spare wheel is carried on a strong bracket behind the rear petrol tank.

EQUIPMENT.—See Le Mans chassis specification, page 8.

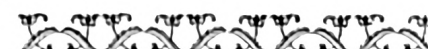
COLOURS.—See list of standard colours, centre page.

OVERALL LENGTH.—12' 8"

HEIGHT (Hood raised).—4' 5"

WIDTH.—5' 5"

APPROX. WEIGHT.—19 cwt.


PRICE,
complete as above £595

This chassis differs from the Le Mans Model in the following respects :—



PECIFICATION OF THE STANDARD CHASSIS

ENGINE.—Max. b.h.p. 55 @ 4,500 r.p.m. Compression ratio 6/1.

COMBUSTION HEAD.—A different shape of head is fitted which, with the lower compression ratio gives greater flexibility and docility.

COOLING.—A higher radiator is fitted to enable the chassis to conform to the lines of a saloon or touring body.

PISTONS.—A patented non-slap type of aluminium piston is fitted.

GEARBOX.—A special gearbox is used having silent 2nd and 3rd gears engaged by dogs. It is operated by a central lever and gate. The following are the gear ratios and speeds using the 5.11 rear axle ratio and 18" wheels with 5.25" tyres.

	ratio	m.p.h.	} at 4,500 r.p.m.
Top	5.11	73	
Silent 3rd	7.05	53	
Silent 2nd	11.49	32	
1st	17.88	21	
Reverse	17.88		

REAR AXLE.—The standard axle ratio is 5.11.

FUEL SUPPLY.—The petrol tank is fitted between the rear dumb irons. Two sizes are fitted, depending on the type of body. The capacities are 9 and 11 gallons, giving a cruising range of 270 and 330 miles respectively.

The fuel is fed to the engine by an S.U. petrolift, an electric pump which draws the fuel into a small header tank from whence it gravitates to the engine.

EQUIPMENT.—Screw-on type caps are fitted to water, oil, and petrol tanks.

The dashboard is of the centrally illuminated type and is supplied with speedometer, ammeter, oil pressure gauge, petrol gauge, and clock.

Wheel base 10'

Track 4' 4"



CHASSIS PRICE **£485**
(complete as above)



IST OF STANDARD COLOURS

Any combination of these colours can be supplied, and any deviation from them at an extra charge of £5 5s. od.

Black
Humber Maroon
Olive Green
Cadbury Brown
Hazel Brown
Powder Blue

for bodies,
wings, wheels,
chassis.

Black

Red

Green

Brown

Blue

for upholstery.

HOOD MATERIAL.—Fawn, Black, or Green.



PECIFICATION OF THE SALOON

Due to its low build the Aston Martin Chassis lends itself to the manufacture of a low car without loss of headroom, and without the need of deception by the fitting of low valances. In view of this the saloon is very roomy and comfortable, and is in addition of excellent appearance and light weight.

With these attributes it should appeal strongly to those who can appreciate the merits of a genuine low centre of gravity, and also to those who require comfort and headroom in addition.

It is fitted with four doors closing on to two central pillars. Upholstery is of the best quality hide, and the two front seats are of the bucket type and are adjustable.

The windscreen is of the one piece type, and opens outwards from the bottom, and a concealed type tandem windscreen wiper is fitted.

A luggage locker with ample space for two suitcases is provided behind the rear seats, and access to this is through a large hinged opening in the tail.

The spare wheel is mounted on a bracket on this latter.

Graceful valanced wings are fitted giving excellent protection to the body, and at the same time great accessibility to the engine.

There are no running boards.

EQUIPMENT.—See standard chassis specification, page 12.

COLOURS.—See list of standard colours, centre page.

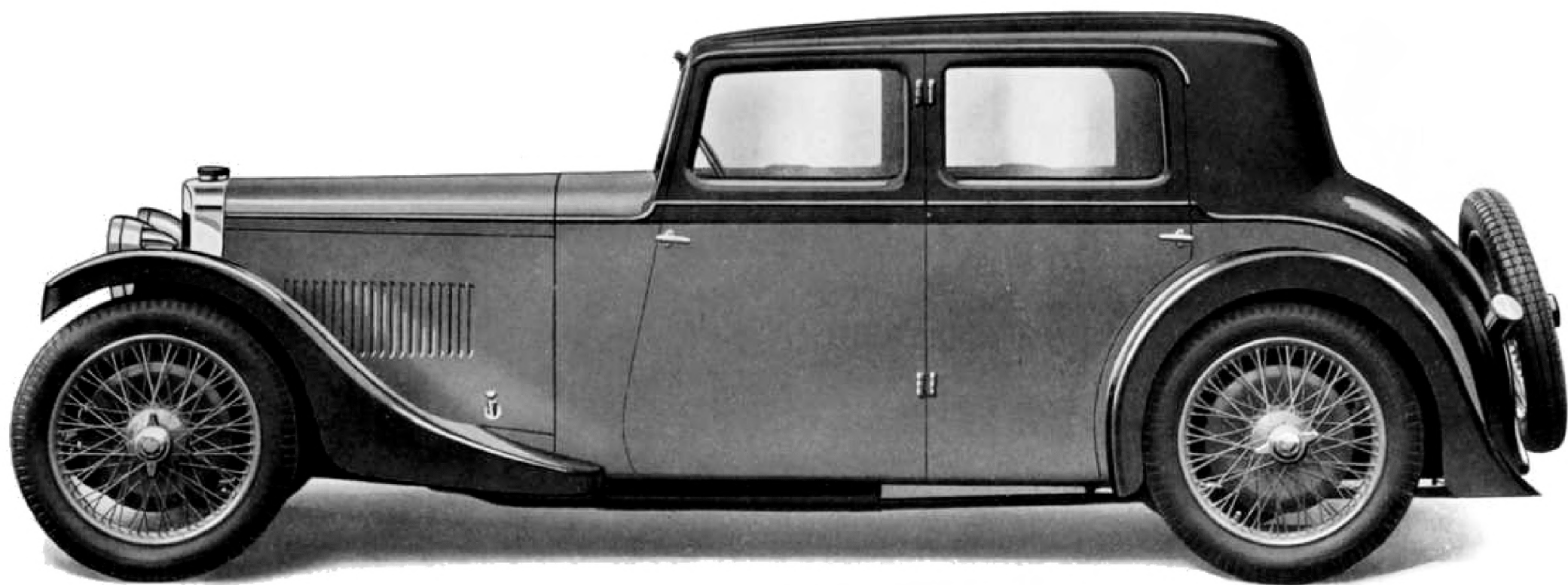
OVERALL LENGTH.—14' 5"

HEIGHT.—4' 11"

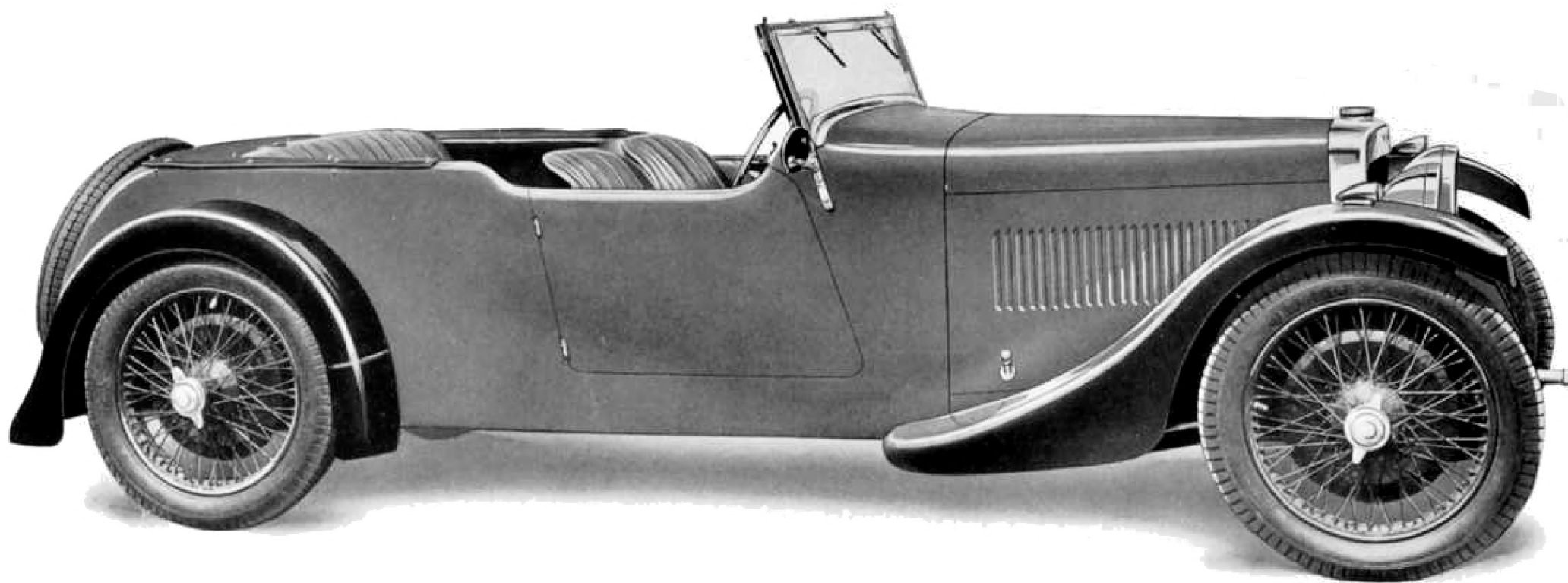
WIDTH.—5' 5"

APPROX. WEIGHT.—23 cwt.


PRICE
complete as above £595



4 DOOR SALOON



4-SEATER TOURER



SPECIFICATION OF THE 4-SEATER TOURER

This body should appeal to those who prefer an open car but must also have adequate protection.

The seats have been kept as low as possible, and in consequence good protection is given by the sides of the body, this being achieved without cramping the passengers in any way due to the exceptional width provided.

Upholstery is of the best quality hide, and the two front seats are of the bucket type and are adjustable.

As in the Saloon, ample luggage accommodation for two suitcases is provided in the tail, access to this being through a large hinged opening.

The spare wheel is mounted on a strong bracket on the tail.

A wide single-piece windscreen, which opens from the bottom, is fitted.

Great care has been taken to ensure that the hood can be erected and concealed easily and quickly. A special compartment behind the rear seats conceals the hood (no hood slip being necessary) and this is covered by a buttoned flap.

The wings are similar to those of the Saloon, and no running boards are fitted—the car has unusual and pleasing lines.

EQUIPMENT—See standard chassis specification, page 12.

COLOURS.—See list of standard colours, centre page.

OVERALL LENGTH.—14' 5"

HEIGHT (Hood raised).—4' 11"

WIDTH.—5' 5"

APPROX. WEIGHT.—21 cwt.



PRICE

complete
as above £550



SPECIFICATION

OF THE

"LE MANS SPECIAL" 4-SEATER

This "Special" model has been added to our range to meet the requirements of those who require exceptional performance with complete comfort and weather protection.

The normal Le Mans 8' 6" Chassis has been lengthened to 10' thus enabling a full four seater body to be fitted. The rear seats are as low as the front being only 17 inches from the ground.

This gives the rear passengers adequate protection although the sides of the body are low, and the whole has a pleasing streamline appearance. There are no cowls on the scuttle, which enables the windscreen to be brought very close to the steering wheel.

A special feature is the windscreen, which folds flat on the scuttle and is fitted with large side wind deflectors which are adjustable. These are arranged to act as a pair of aero screens when the main screen is down—a unique feature. In addition to this a full set of side curtains is supplied for complete protection. The tool kit is neatly

arranged in a panel on the nearside of the body, and the jack and wheel changing equipment are housed under the bonnet.

An internal 12 gallon petrol tank is fitted and a luggage container is provided in the tail.

The spare wheel is sunk into the tail and is fitted with a metal cover which gives an exceptionally neat appearance when viewed from the rear.

EQUIPMENT.—Similar to Le Mans specification, page 8, but with special high-class instruments throughout, comprising:—speedometer, clock, rev. counter, water thermo, oil pressure gauge, ammeter, electric petrol gauge, separate switches, easy starting device.

COLOURS.—See list of standard colours, centre page.

OVERALL LENGTH.—14' 5"

HEIGHT (Hood raised)—4' 7"

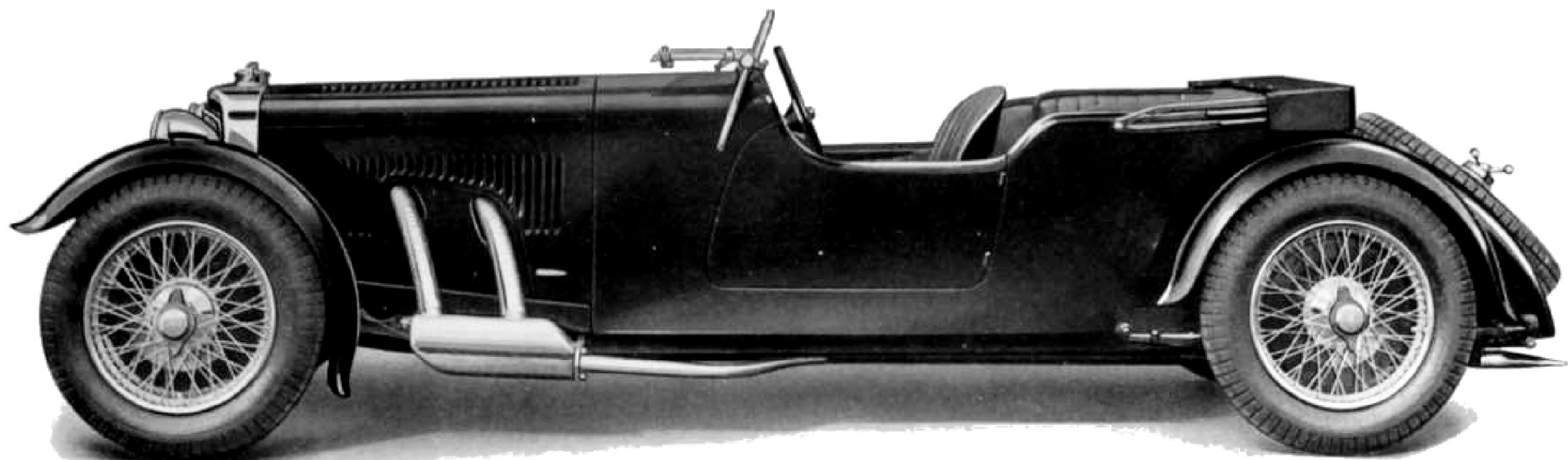
WIDTH.—5' 5"

APPROX. WEIGHT.—20 cwt.

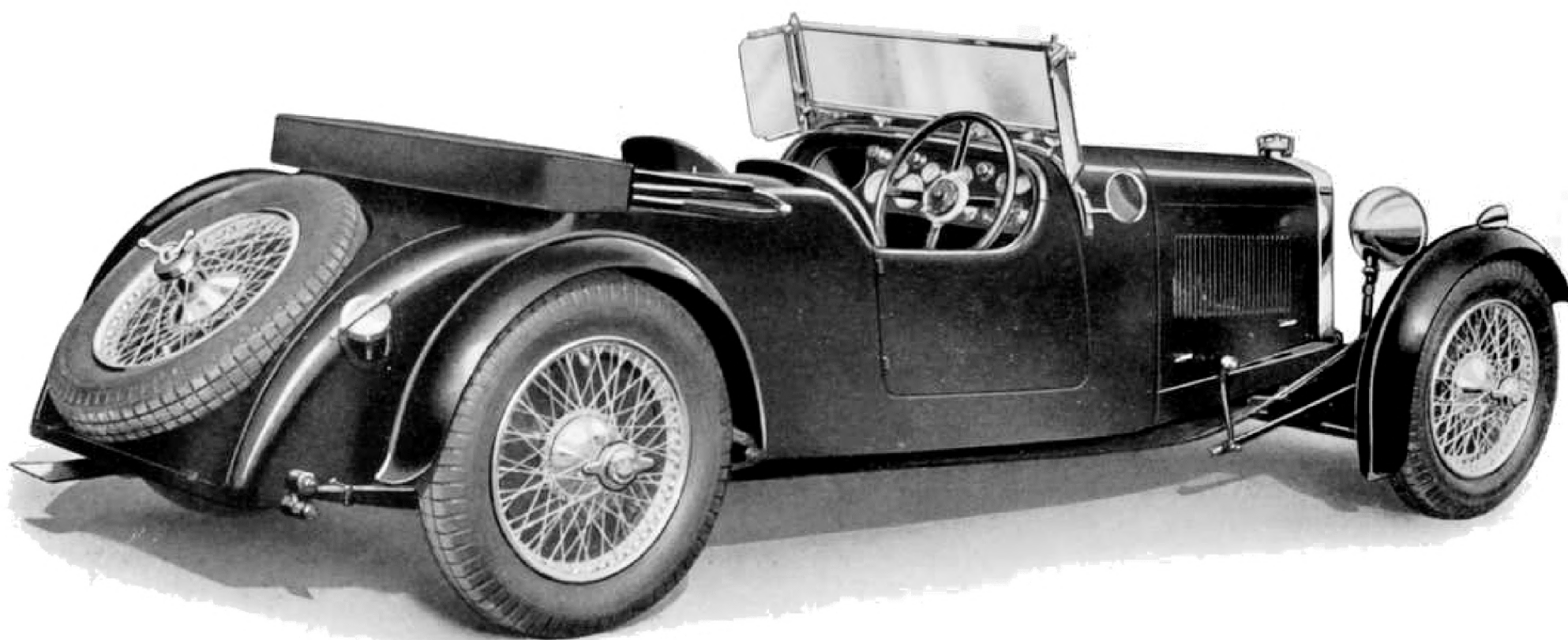


PRICE,
complete as above

£625



"LE MANS SPECIAL" 4-SEATER



"LE MANS SPECIAL" 4-SEATER

TERMS OF BUSINESS

PRICES.—The prices given in this Catalogue are subject to alterations without notice, and all orders are accepted for execution at the price ruling at date of delivery.

ILLUSTRATIONS are given as a general guide to Purchasers, and are not binding as to details.

DELIVERY is at our Works, Feltham, Middlesex. The Company will do their utmost to give delivery by the arranged date, but all orders are accepted without guarantee in this respect, and the Company accept no liability for failure to deliver. In case of goods going abroad, inspection, examination, checking or testing (where practicable) of such goods or their packing, must be made at our Works, as no claims in respect of shortage or fault in such

goods or packing will be sustainable or entertained after they leave our works.

THE TERM "AGENT" is used in a complimentary sense only, and those firms whom we style our Agents are not authorised to advertise, incur any debts, or transact any business whatsoever on our account, other than the sale of goods which they may purchase from us; nor are they authorised to give any warranty, or make any representation on our behalf other than those contained in our guarantee.

EXHIBITION.—All Cars or Chassis sold by the Company are supplied upon the express condition that they shall not be exhibited, directly or indirectly, by the Agent or Purchaser, at any Exhibition in the United Kingdom, without the written permission of the Company.



RESS OPINIONS FROM THE LEADING MOTORING JOURNALS

Country Life.

"On the top gear 10 to 20 m.p.h. required 6 sec. ; 10 to 30 m.p.h., 10 secs. ; 10 to 40 m.p.h., 13 3-5 secs. ; 10 to 50 m.p.h., 19 secs. ; and 10 to 60 m.p.h., 26 secs. On the third gear, 10 to 50 m.p.h. could be reached in under 17 secs. ; and on the second, 10 to 40 m.p.h. in just over 8 secs.

A standing 70 m.p.h. going through the gear box as far as third, required under 27 secs., and a standing 80 m.p.h. could be reached in under 35 secs. The maximum speed of the car was about 85 m.p.h. under normal conditions.

The brakes are exceptionally good and will stop the car in under 16 ft. from 20 m.p.h. The drums are 14 ins. in diameter, and the foot brake is so arranged that the front wheel brakes are applied direct; while there is a definitely controlled amount of pressure on the rear wheels. The lever acts directly on the rear brakes."

The Autocar.

"The make occupies its position among the best sports cars available, first, of course, because it has the essential performance, but also because the car as a whole is of a size which makes it convenient to handle on

modern, crowded roads, and, further, because it can be driven quite gently when the owner feels so inclined, even on top gear for a considerable portion of the time, since on that ratio the engine is extraordinarily flexible for a four cylinder. Again, and this is probably most important of all, there is about the car that suggestion of being exactly right for its work, which means so much and yet is extremely difficult to convey in words.

"The suspension might be almost that of a touring car, judging from the comfort it gives, for even at low speeds there is an almost complete absence of the harsh movement sometimes noticed with a sports car. Yet without altering the setting of the shock absorbers, it is possible to drive the car at the maximum on the track and take it round corners really fast on the road. Even reckoned by the standard of other sports cars, the Aston-Martin corners exceedingly well, the point being that no particular effort is required from the driver.

"Throughout there is that suggestion of tense solidity of being 'all in one piece,' which is so difficult to obtain and so valuable when attained. Further, the steering gear is direct, relatively high geared, and can be controlled with a finger and thumb. This type of car, properly handled, ought to be a remarkably fine mount for competition work and fast touring."

The Field. (Motoring Editor, Sir Malcolm Campbell).

"On the road the first impression in traffic was of control. The well thought out close ratio gears, combined with the liveliness of the engine gave amazing acceleration, while the large diameter brakes act perfectly on either dry roads or wet. In short, the Aston-Martin is a very fine car for the man who loves a thoroughbred; it combines the spirit of a racehorse with the manners of an ambassador."

Motor Sport.

"Throughout the chassis there are illustrations of the extraordinary amount of care and forethought which goes to the building of a thoroughbred motor car.

"Many cars sprung for road-holding at high speeds are liable to be harsh when taken over freak surfaces at ordinary speeds, but in the case of this car we found that as well as being abnormally steady at high speeds even on bad surfaces, it was very good on rough stuff without altering the adjustment of the Hartfords."

The Motor.

"What we are trying to say is that the little 11.9 Aston-Martin gave us a thrill of pleasure such as we have only experienced at rare intervals, on a very few of the cream of the world's sports cars. The driver immediately becomes a part of it. Man and machine swoop down long, straight stretches of road, swing round bends, or roar up hills in a continual close companionship. The perfect roadholding, the feather light steering make the longest, fastest journey an effortless, wonderfully enjoyable undertaking.

"From stem to stern the Aston-Martin is a thoroughbred and gives the impression that it has been built entirely regardless of cost."

The Auto.

"For sheer enjoyment of handling I have never sat in anything better—a marvellously quiet engine, an excellent gear box, beautiful steering and suspension, admirable brakes."



Guarantee

In the manufacture of Aston Martin Cars we use all reasonable care and skill to ensure the selection and use of the best materials and the best workmanship. Accordingly, in lieu of the warranty or guarantee as to the fitness for the purposes for which they are sold, implied by Common Law, Statute, or otherwise, which warranty or guarantee is, in all cases, excluded, we give to those purchasing from us the following guarantee with all new Aston Martin Cars purchased from us :—

If any part of a New Aston Martin Car supplied by us, direct, or through one of our recognised agents, and whilst still the property of the first owner, should under normal conditions be found to be defective AT ANY TIME DURING THE LIFE OF THE CAR through faulty materials or workmanship, we guarantee to repair the defect free of charge, or supply a replica of the part, provided notice of the defect be communicated to us in writing at our works forthwith on its discovery, with the number of the

Engine and Chassis and the date of sale by us, and the defective part, unaltered and unrepaired by others than ourselves, and such other parts as we may require, be first delivered to us carriage paid, at our works, with all reasonable despatch. If parts are ordered or telegraphed for, without mentioning that they are required as free replacements under guarantee, they must be paid for in all cases, and claims made after the new parts have been supplied will not be entertained.

Our guarantee does not refer to tyres, lamps, electric fittings, or other articles not of our manufacture.

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